

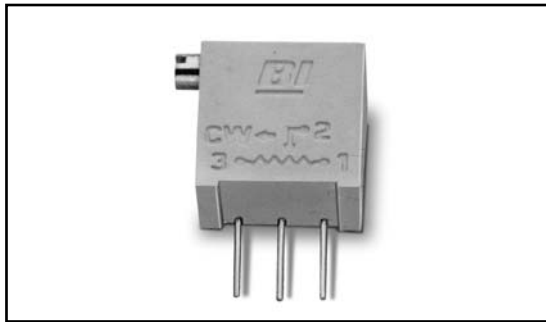
# MODEL 68

## 3/8" Square

### Multiturn

### Cermet Trimming

### Potentiometer



1

#### ELECTRICAL

|  |  |
|--|--|
| Standard Resistance Range, Ohms          | 10 to 2Meg                                     |
| Standard Resistance Tolerance            | ±10% (<100 Ohms = ±20%)                        |
| Input Voltage, Maximum                   | 200 Vdc or rms not to exceed power rating      |
| Slider Current, Maximum                  | 100mA or within rated power, whichever is less |
| Power Rating, Watts                      | 0.5 at 85°C derating to 0 at 125°C             |
| End Resistance, Maximum                  | 2 Ohms   |
| Actual Electrical Travel, Turns, Nominal | 20   |
| Dielectric Strength                      | 900 Vrms                                       |
| Insulation Resistance, Minimum           | 1,000 Megohms                                  |
| Resolution                               | Essentially infinite                           |
| Contact Resistance Variation, Maximum    | 1% or 1 Ohm, whichever is greater              |

#### ENVIRONMENTAL

|                                  |  |
|----------------------------------|--|
| Seal                             | 85°C Fluorinert® (No Leaks)                        |
| Temperature Coefficient, Maximum | ±100ppm/°C   |
| Temperature Range                | -55°C to +125°C                                    |
| Thermal Shock                    | 5 cycles, -55°C to +125°C (1% ΔRT, 1% ΔVR)         |
| Moisture Resistance              | Ten 24 hour cycles (1% ΔRT, IR 1,000 Megohms min.) |
| Shock, 6ms Sawtooth              | 100G's (1% ΔRT, 1% ΔVR)                            |
| Vibration                        | 20G's, 10 to 2,000 Hz (1% ΔRT, 1% ΔVR)             |
| High Temperature Exposure        | 250 hours at 125°C (2% ΔRT, 2% ΔVR)                |
| Rotational Life                  | 200 cycles (3% ΔRT)                                |
| Load Life at 0.5 Watts           | 1,000 hours at 70°C (2% ΔRT)                       |
| Resistance to Solder Heat        | 260°C for 10 sec. (1% ΔRT)                         |

#### MECHANICAL

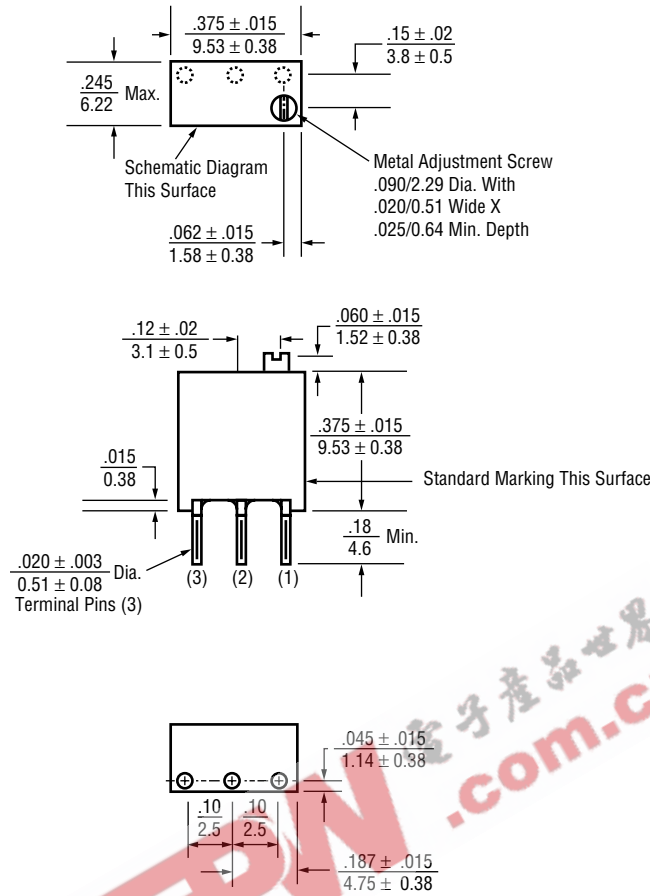
|                          |                          |
|--------------------------|--------------------------|
| Mechanical Stops         | Clutch Action, both ends |
| Torque, Starting Maximum | 5 oz.-in. (0.035 N-m)    |
| Weight, Nominal          | .04 oz. (1.13 grams)     |

Fluorinert® is a registered trademark of 3M Company.  
Specifications subject to change without notice.



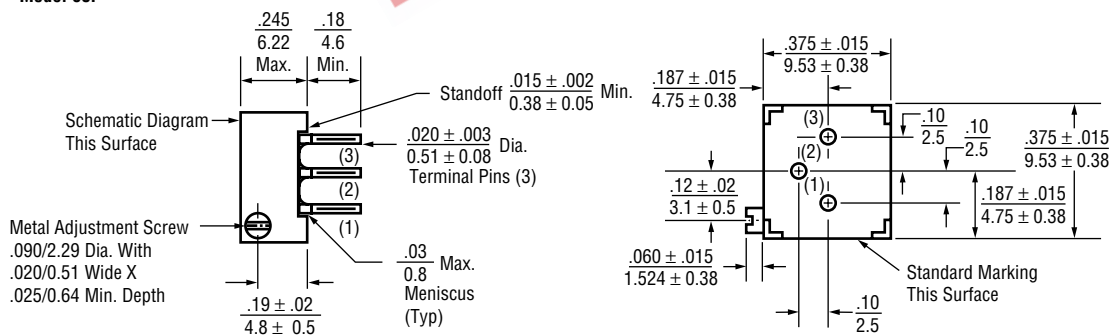
**TOP ADJUSTMENT (Inch/mm)**

**Model 68W**



**SIDE ADJUSTMENT (Inch/mm)**

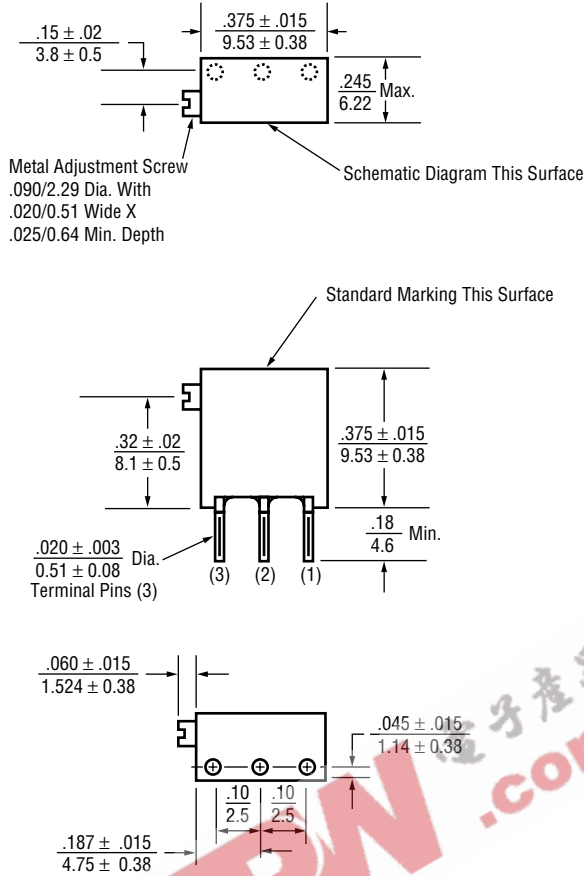
**Model 68P**



**SIDE ADJUSTMENT (Inch/mm)**

**1**

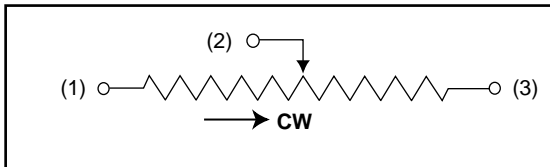
Model 68X



**STANDARD RESISTANCE VALUES, OHMS**

|     |     |     |      |      |
|-----|-----|-----|------|------|
| 10  | 200 | 5K  | 50K  | 500K |
| 20  | 500 | 10K | 100K | 1Meg |
| 50  | 1K  | 20K | 200K | 2Meg |
| 100 | 2K  | 25K | 250K |      |

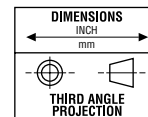
**CIRCUIT DIAGRAM**



**NOTES**

Metric equivalents, based on 1 inch = 25.4mm are rounded to the same number of significant figures as in the original English units and are provided for general information only.

Tolerances unless otherwise specified:  
 Linear = ± .01 inches (.25mm)  
 Angular = ± 2 degrees



## PACKAGING

**Standard:** Boxes

|          |   |                             |
|----------|---|-----------------------------|
| Capacity | = | 100 Units (68W)             |
|          | = | 50 Units (All other styles) |

**Option:** Tubes

All units oriented with #1 pin to same side.

|          | Pin Style |   | P        | W        | X        |
|----------|-----------|---|----------|----------|----------|
| Magazine | Width     | = | 0.57"    | 0.33"    | 0.33"    |
|          | Height    | = | 0.66"    | 0.90"    | 0.90"    |
|          | Length    | = | 20.9"    | 20.4"    | 24.4"    |
|          | Capacity  | = | 50 Units | 50 Units | 50 Units |

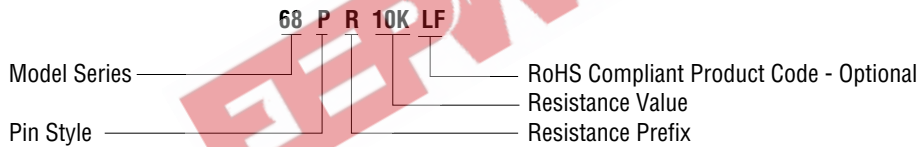
**Option:** Tape & Reel, Ammo Pack (Available only for 68W and 68X)

All units oriented with #1 pin to the right of the direction of feed.

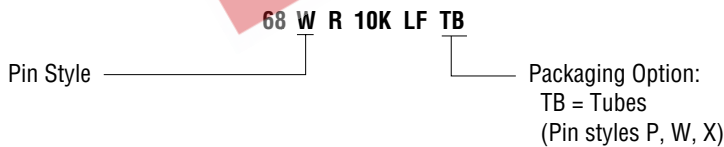
|          |   |   |  |
|----------|---|---|--|
|          | Seat Plane to Centerline of Sprocket Hole | = | .71" (18.03 mm)                            |
| Tape     | Width                                     | = | 18 mm                                      |
|          | Sprocket                                  | = | Single Hole .50" spacing                   |
|          | Capacity                                  | = | 1,000 Units                                |
| Reel     | Diameter                                  | = | 14" (356 mm)                               |
| Ammo Box | Tape Fold                                 | = | 12" (305 mm)                               |
|          |   | = | 1.8" x 13" x 10"<br>(46mm x 330mm x 254mm) |

## ORDERING INFORMATION

**Standard:**



**Option:**



**Option:**

